

EAST Search History / Interference Search

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	11741	ORGANOSILICON	US-PGPU B; USPAT	ADJ	OFF	2007/10/24 08:20
L2	957	CYCLIC WITH L1	US-PGPU B; USPAT	ADJ	OFF	2007/10/24 08:20
L3	18	ALKOXYSilANE WITH L2	US-PGPU B; USPAT	ADJ	ON	2007/10/24 08:20

CAS ONLINE PRINTOUT

=> d his

(FILE 'HOME' ENTERED AT 07:14:11 ON 24 OCT 2007)

FILE 'REGISTRY' ENTERED AT 07:14:20 ON 24 OCT 2007

L1 STRUCTURE UPLOADED

L2 1 S L1

L3 15 S L1 FUL

FILE 'CAPLUS' ENTERED AT 07:15:09 ON 24 OCT 2007

L4 14 S L3

FILE 'REGISTRY' ENTERED AT 07:18:15 ON 24 OCT 2007

L5 STRUCTURE UPLOADED

L6 2016 S L5 FUL

FILE 'CAPLUS' ENTERED AT 07:18:44 ON 24 OCT 2007

FILE 'REGISTRY' ENTERED AT 07:18:49 ON 24 OCT 2007

L7 STRUCTURE UPLOADED

L8 STRUCTURE UPLOADED

L9 74 SEARCH L8 SSS SUB=L6 FULL

FILE 'CAPLUS' ENTERED AT 07:23:00 ON 24 OCT 2007

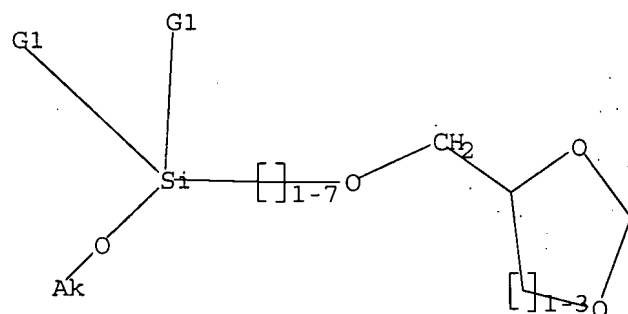
L10 2270 S L9

L11 2 S L10 AND L4

=> d l1

L1 HAS NO ANSWERS

L1 STR



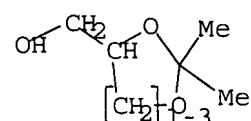
G1 Ak, MeO, EtO, n-PrO, i-PrO, n-BuO, i-BuO, s-BuO, t-BuO

Structure attributes must be viewed using STN Express query preparation.

=> d l8

L8 HAS NO ANSWERS

L8 STR



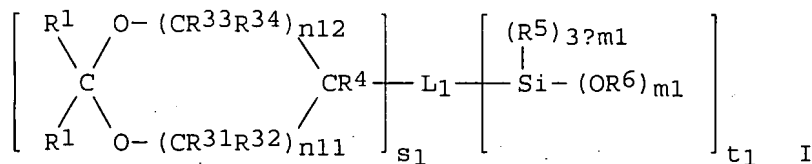
G1 Ak, MeO, EtO, n-PrO, i-PrO, n-BuO, i-BuO, s-BuO, t-BuO

Structure attributes must be viewed using STN Express query preparation.

=> d bib abs hitstr 1-2 111

L11 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2005:1074041 CAPLUS
 DN 143:369971
 TI Sol-gel reaction products, solid electrolytes, protonic conductors, and membrane-electrode assemblies for fuel cells
 IN Wariishi, Koji
 PA Fuji Photo Film Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 40 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2005272556	A	20051006	JP 2004-86053	20040324
PRAI	JP 2004-86053		20040324		
OS	MARPAT 143:369971				
GI					

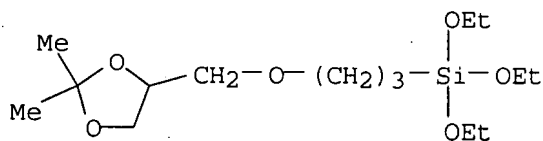


AB The reaction products are prepared from I (R1, R2 = H, alkyl, aryl, heterocyclic ring, R1 and R2 may link together to form a ring; R31, R32, R33, R34, R4 = H, alkyl, aryl, heterocyclic ring; R5 = alkyl, aryl, heterocyclic ring; R6 = H, alkyl, aryl, silyl; m1 = 1-3; n11, n12 = 0-4; L1 = single bond, linkage group with valency (s1 + t1); s1, t1 = 1-4), and compds. having proton-donating substituent groups. The protonic conductors show high protonic conductivity and low methanol permeability.

IT 863015-08-1P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of cyclic acetal-containing alkoxysilanes for sol-gel reaction products for protonic conductors of fuel cells)

RN 863015-08-1 CAPLUS

CN Silane, [3-[(2,2-dimethyl-1,3-dioxolan-4-yl)methoxy]propyl]triethoxy-
 (9CI) (CA INDEX NAME)

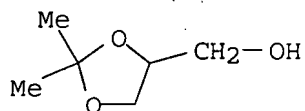


IT 100-79-8
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of cyclic acetal-containing alkoxysilanes for sol-gel reaction products for protonic conductors of fuel cells)

CAS ONLINE PRINTOUT

RN 100-79-8 CAPLUS

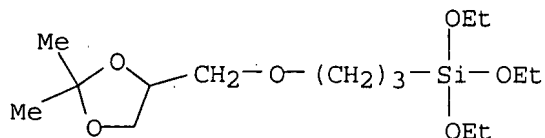
CN 1,3-Dioxolane-4-methanol, 2,2-dimethyl- (CA INDEX NAME)



IT 863015-08-1DP, polymers with oxidized
mercaptoalkyltrialkoxysilanes and alkoxysilanes 866228-58-2P
RL: DEV (Device component use); IMF (Industrial manufacture); TEM
(Technical or engineered material use); PREP (Preparation); USES (Uses)
(sol-gel reaction products of cyclic acetal-containing alkoxysilanes and
proton-donating compds. for protonic conductors of fuel cells)

RN 863015-08-1 CAPLUS

CN Silane, [3-[(2,2-dimethyl-1,3-dioxolan-4-yl)methoxy]propyl]triethoxy-
(9CI) (CA INDEX NAME)



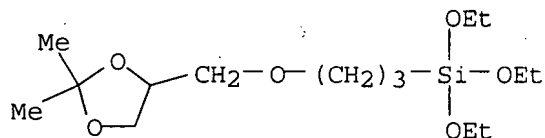
RN 866228-58-2 CAPLUS

CN 1-Propanesulfonic acid, 3-(triethoxysilyl)-, polymer with
[3-[(2,2-dimethyl-1,3-dioxolan-4-yl)methoxy]propyl]triethoxysilane and
4,4,13,13-tetraethoxy-3,14-dioxo-4,13-disilahehexadecane (9CI) (CA INDEX
NAME)

CM 1

CRN 863015-08-1

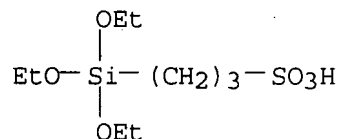
CMF C15 H32 O6 Si



CM 2

CRN 260784-99-4

CMF C9 H22 O6 S Si

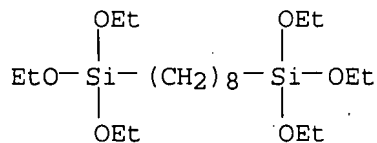


CAS ONLINE PRINTOUT

CM 3

CRN 52217-60-4

CMF C20 H46 O6 Si2



L11 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2005:902902 CAPLUS

DN 143:230419

TI Preparation of organosilicon compounds for organic silicone resin having diols with good storage stability

IN Komuro, Katsuhiko; Suzuki, Hiroshi

PA Toagosei Co., Ltd., Japan

SO PCT Int: Appl., 24 pp.

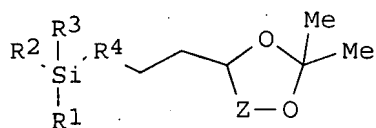
CODEN: PIXXD2

DT Patent

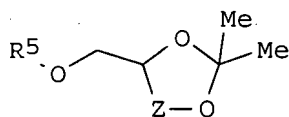
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005077960	A1	20050825	WO 2005-JP1972	20050209
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	KR 2007010124	A	20070122	KR 2006-718987	20060915
	US 2007173625	A1	20070726	US 2007-589262	20070111
PRAI	JP 2004-39064	A	20040216		
	JP 2004-39065	A	20040216		
	WO 2005-JP1972	W	20050209		
GI					



I



II

AB The organosilicon resin having a diol is prepared by hydrolyzing/condensing an organic compound I obtained by hydrosilylation reaction between a compound

II and a silane compound R¹R²R³SiH with a polyfunctional alkoxyasilane, wherein

CAS ONLINE PRINTOUT

R1, R2, R3 = C1-6 alkyl or alkoxy; R4 = C2-6 alkylene; R5 = alkene having a terminal C:C bond and Z = C1-3 alkylene. The organosilicon resin is produced by the hydrolysis/condensation of a mixture comprising the organosilicone compound I and a mol. weight modifier. Thus, 227 mmol 2,2-dimethyl-1,3-dioxolane-4-methanol and 250 mmol allyl bromide were reacted in the presence of sodium hydride, 119 mmol of the resulting 4-[(allyloxy)methyl]-2,2-dimethyl-1,3-dioxolane was reacted with 131 mmol triethoxysilane in the presence of a divinyltetramethyldisiloxane platinum complex to give 4-[(3-triethoxysilylpropyloxy)methyl]-2,2-dimethyl-1,3-dioxolane, 12 mmol of which was reacted with 44.1 mmol methyltrimethoxysilane and 12 mmol hexamethyldisiloxane in the presence of 3.74 g 1.5% aqueous hydrochloric acid for 1.5 h, reacted with hexamethyldisilazane, and dried to give a silsesquioxane resin having diols, showing good storage stability.

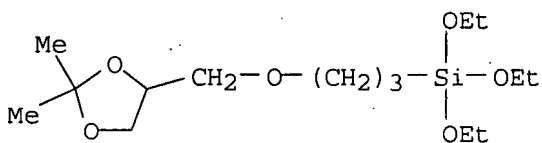
IT 863015-08-1P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of organosilicon compds. for organic silicone resin having diols)

RN 863015-08-1 CAPLUS

CN Silane, [3-[(2,2-dimethyl-1,3-dioxolan-4-yl)methoxy]propyl]triethoxy- (9CI) (CA INDEX NAME)



IT 863015-09-2DP, trimethylsilyl-terminated, deprotected

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(preparation of organosilicon compds. for organic silicone resin having diols)

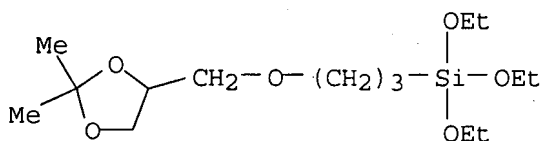
RN 863015-09-2 CAPLUS

CN Silane, [3-[(2,2-dimethyl-1,3-dioxolan-4-yl)methoxy]propyl]triethoxy-, polymer with trimethoxymethylsilane (9CI) (CA INDEX NAME)

CM 1

CRN 863015-08-1

CMF C15 H32 O6 Si

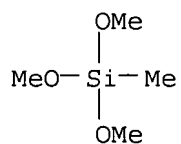


CM 2

CRN 1185-55-3

CMF C4 H12 O3 Si

CAS ONLINE PRINTOUT



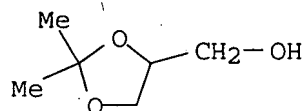
IT 100-79-8

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of organosilicon compds. for organic silicone resin having diols)

RN 100-79-8 CAPLUS

CN 1,3-Dioxolane-4-methanol, 2,2-dimethyl- (CA INDEX NAME)



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=>

CAS ONLINE PRINTOUT

=> d his

(FILE 'HOME' ENTERED AT 07:14:11 ON 24 OCT 2007)

FILE 'REGISTRY' ENTERED AT 07:14:20 ON 24 OCT 2007

L1 STRUCTURE UPLOADED

L2 1 S L1

L3 15 S L1 FUL

FILE 'CAPLUS' ENTERED AT 07:15:09 ON 24 OCT 2007

L4 14 S L3

FILE 'REGISTRY' ENTERED AT 07:18:15 ON 24 OCT 2007

L5 STRUCTURE UPLOADED

L6 2016 S L5 FUL

FILE 'CAPLUS' ENTERED AT 07:18:44 ON 24 OCT 2007

FILE 'REGISTRY' ENTERED AT 07:18:49 ON 24 OCT 2007

L7 STRUCTURE UPLOADED

L8 STRUCTURE UPLOADED

L9 74 SEARCH L8 SSS SUB=L6 FULL

FILE 'CAPLUS' ENTERED AT 07:23:00 ON 24 OCT 2007

L10 2270 S L9

L11 2 S L10 AND L4

SELECT RN L11 2

FILE 'REGISTRY' ENTERED AT 07:31:45 ON 24 OCT 2007

L12 7 S E1-E7

FILE 'REGISTRY' ENTERED AT 07:36:49 ON 24 OCT 2007

L13 STRUCTURE UPLOADED

L14 50 S L13

L15 250022 S L13 FUL

FILE 'CAPLUS' ENTERED AT 07:38:03 ON 24 OCT 2007

L16 155778 S L15

L17 14 S L16 AND L4

FILE 'REGISTRY' ENTERED AT 07:40:04 ON 24 OCT 2007

L18 15476 SEARCH L13 CSS SUB=L15 FULL

FILE 'CAPLUS' ENTERED AT 07:40:53 ON 24 OCT 2007

=> s l18

L19 62998 L18

=> s l19 and l4

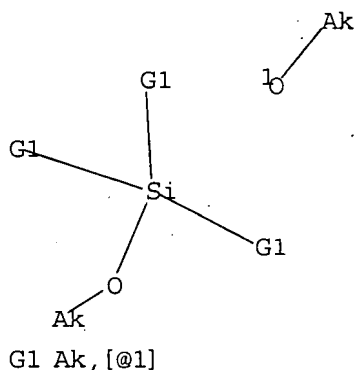
L20 2 L19 AND L4

=> d l13

L13 HAS NO ANSWERS

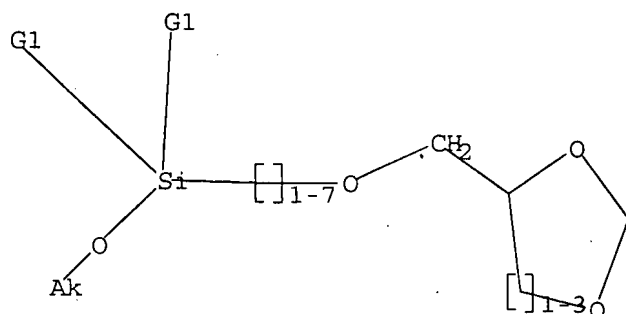
L13 STR

CAS ONLINE PRINTOUT



Structure attributes must be viewed using STN Express query preparation.

=> d l1
L1 HAS NO ANSWERS
L1 STR



G1 Ak,MeO,EtO,n-PrO,i-PrO,n-BuO,i-BuO,s-BuO,t-BuO

Structure attributes must be viewed using STN Express query preparation.

=> d bib abs hitstr 1-2 120

L20 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2007:287048 CAPLUS
DN 146:341046
TI Cyclic carbonate-modified organosilicon non-aqueous electrolytes for
secondary batteries and capacitors
IN Nakanishi, Tetsuo; Kashida, Meguru; Miyawaki, Satoru
PA Shin-Estu Chemical Co., Ltd., Japan
SO U.S. Pat. Appl. Publ., 12pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2007059607	A1	20070315	US 2006-514106	20060901
	JP 2007077052	A	20070329	JP 2005-265551	20050913
	KR 2007030682	A	20070316	KR 2006-87897	20060912
	CN 1931863	A	20070321	CN 2006-10151899	20060913

CAS ONLINE PRINTOUT

PRAI JP 2005-265551 A 20050913

AB A cyclic carbonate-modified silane or siloxane is combined with a nonaq. solvent and an electrolyte salt to form a non-aqueous electrolytic solution

This

electrolyte is used in a secondary battery which has improved temperature and cycling characteristics.

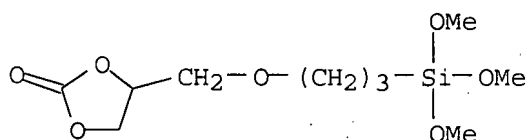
IT 42345-73-3P

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(cyclic carbonate-modified organosilicon non-aqueous electrolytes for secondary batteries and capacitors)

RN 42345-73-3 CAPLUS

CN 1,3-Dioxolan-2-one, 4-[[3-(trimethoxysilyl)propoxy]methyl]- (CA INDEX NAME)



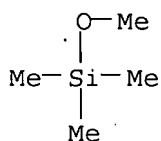
IT 1825-61-2, Trimethylmethoxysilane

RL: RCT (Reactant); RACT (Reactant or reagent)

(cyclic carbonate-modified organosilicon non-aqueous electrolytes for secondary batteries and capacitors)

RN 1825-61-2 CAPLUS

CN Silane, methoxytrimethyl- (CA INDEX NAME)



L20 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2005:902902 CAPLUS

DN 143:230419

TI Preparation of organosilicon compounds for organic silicone resin having diols with good storage stability

IN Komuro, Katsuhiko; Suzuki, Hiroshi

PA Toagosei Co., Ltd., Japan

SO PCT Int. Appl., 24 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

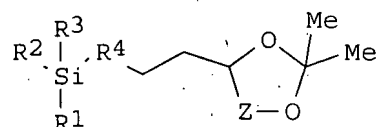
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005077960	A1	20050825	WO 2005-JP1972	20050209
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,			

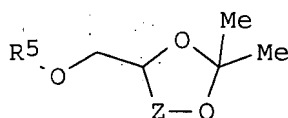
CAS ONLINE PRINTOUT

AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
 EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
 RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
 MR, NE, SN, TD, TG

KR 2007010124 A 20070122 KR 2006-718987 20060915
 US 2007173625 A1 20070726 US 2007-589262 20070111
 PRAI JP 2004-39064 A 20040216
 JP 2004-39065 A 20040216
 WO 2005-JP1972 W 20050209
 GI



I



II

AB The organosilicon resin having a diol is prepared by hydrolyzing/condensing an organic compound I obtained by hydrosilylation reaction between a compound

II and a silane compound $R_1R_2R_3SiH$ with a polyfunctional alkoxy silane, wherein $R_1, R_2, R_3 = C_1-6$ alkyl or alkoxy; $R_4 = C_2-6$ alkylene; $R_5 =$ alkene having a terminal C:C bond and $Z = C_1-3$ alkylene. The organosilicon resin is produced by the hydrolysis/condensation of a mixture comprising the organosilicon compound I and a mol. weight modifier. Thus, 227 mmol 2,2-dimethyl-1,3-dioxolane-4-methanol and 250 mmol allyl bromide were reacted in the presence of sodium hydride, 119 mmol of the resulting 4-[(allyloxy)methyl]-2,2-dimethyl-1,3-dioxolane was reacted with 131 mmol triethoxysilane in the presence of a divinyltetramethyldisiloxane platinum complex to give 4-[(3-triethoxysilylpropyloxy)methyl]-2,2-dimethyl-1,3-dioxolane, 12 mmol of which was reacted with 44.1 mmol methyltrimethoxysilane and 12 mmol hexamethyldisiloxane in the presence of 3.74 g 1.5% aqueous hydrochloric acid for 1.5 h, reacted with hexamethyldisilazane, and dried to give a silsesquioxane resin having diols, showing good storage stability.

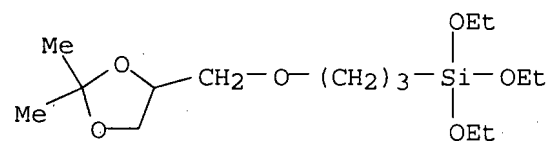
IT 863015-08-1P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of organosilicon compds. for organic silicone resin having diols)

RN 863015-08-1 CAPLUS

CN Silane, [3-[(2,2-dimethyl-1,3-dioxolan-4-yl)methoxy]propyl]triethoxy- (9CI) (CA INDEX NAME)



IT 863015-09-2DP, trimethylsilyl-terminated, deprotected

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(preparation of organosilicon compds. for organic silicone resin having diols)

CAS ONLINE PRINTOUT

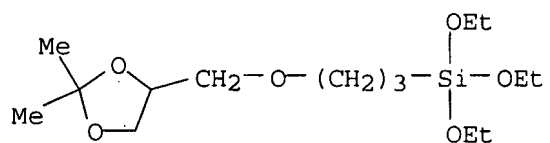
RN 863015-09-2 CAPLUS

CN Silane, [3-[(2,2-dimethyl-1,3-dioxolan-4-yl)methoxy]propyl]triethoxy-,
polymer with trimethoxymethylsilane (9CI) (CA INDEX NAME)

CM 1

CRN 863015-08-1

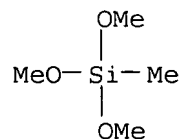
CMF C15 H32 O6 Si



CM 2

CRN 1185-55-3

CMF C4 H12 O3 Si



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=>

CAS ONLINE PRINTOUT

=> d his

(FILE 'HOME' ENTERED AT 07:14:11 ON 24 OCT 2007)

FILE 'REGISTRY' ENTERED AT 07:14:20 ON 24 OCT 2007

L1 STRUCTURE UPLOADED

L2 1 S L1

L3 15 S L1 FUL

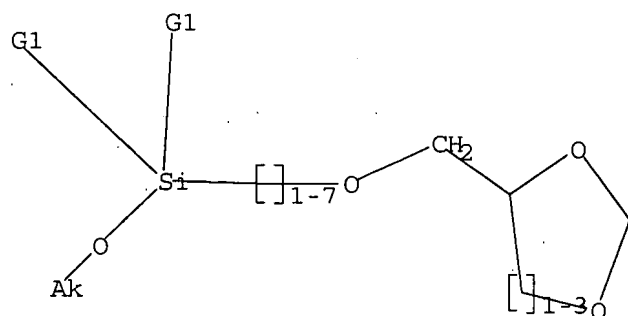
FILE 'CAPLUS' ENTERED AT 07:15:09 ON 24 OCT 2007

L4 14 S L3

=> d l1

L1 HAS NO ANSWERS

L1 STR



G1 Ak, MeO, EtO, n-PrO, i-PrO, n-BuO, i-BuO, s-BuO, t-BuO

Structure attributes must be viewed using STN Express query preparation.

=> d bib abs hitstr 1-14

L4 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2007:789423 CAPLUS

DN 147:235149

TI Method for manufacturing cyclic carbonate from epoxy compound and carbon dioxide

IN Hua, Ruimao; Jiang, Jiali; Ma, Deqiang; Song, Jinhong; Shang, Yonghua; Ding, Jiansheng

PA Ningbo Wanhua Polyurethane Co., Ltd., Peop. Rep. China

SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 10pp.

CODEN: CNXXEV

DT Patent

LA Chinese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 100999514	A	20070718	CN 2006-10170993	20061228
PRAI	CN 2006-10170993		20061228		
OS	CASREACT 147:235149				

AB In the invention, the catalyst system is a homogeneous catalyst system with amide RCONR1R2 (R = H, Me, Et; R1, R2 = H, Me, Et, n-Pr, iso-Pr, Bu, etc.) as a catalyst and water as a promoter. The title method comprises the steps of: (1) adding amide to a reactor, adding water and epoxy compound, and sealing, (2) pumping carbon dioxide gas into the reactor, stirring, heating and reacting, and (3) stopping heating after reacting for 1-20 h, stirring, cooling to room temperature, and releasing the gas. The method has the advantages of low catalyst cost, high catalyst activity and

CAS ONLINE PRINTOUT

high reaction efficiency. The catalyst is stable, environment-friendly, and easy to reuse.

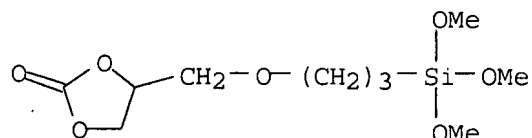
IT 42345-73-3P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(preparation of cyclic carbonate by addition reaction of epoxide with carbon dioxide in presence of amide and water)

RN 42345-73-3 CAPLUS

CN 1,3-Dioxolan-2-one, 4-[[3-(trimethoxysilyl)propoxy)methyl]- (CA INDEX NAME)



L4 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2007:287048 CAPLUS

DN 146:341046

TI Cyclic carbonate-modified organosilicon non-aqueous electrolytes for secondary batteries and capacitors

IN Nakanishi, Tetsuo; Kashida, Meguru; Miyawaki, Satoru

PA Shin-Estu Chemical Co., Ltd., Japan

SO U.S. Pat. Appl. Publ., 12pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2007059607	A1	20070315	US 2006-514106	20060901
	JP 2007077052	A	20070329	JP 2005-265551	20050913
	KR 2007030682	A	20070316	KR 2006-87897	20060912
	CN 1931863	A	20070321	CN 2006-10151899	20060913
PRAI	JP 2005-265551	A	20050913		

AB A cyclic carbonate-modified silane or siloxane is combined with a nonaq. solvent and an electrolyte salt to form a non-aqueous electrolytic solution

This electrolyte is used in a secondary battery which has improved temperature and cycling characteristics.

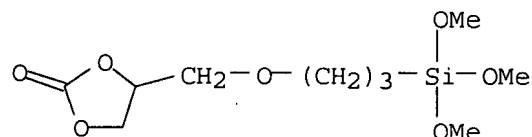
IT 42345-73-3P

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(cyclic carbonate-modified organosilicon non-aqueous electrolytes for secondary batteries and capacitors)

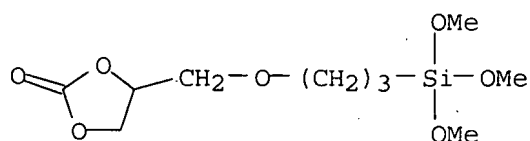
RN 42345-73-3 CAPLUS

CN 1,3-Dioxolan-2-one, 4-[[3-(trimethoxysilyl)propoxy)methyl]- (CA INDEX NAME)



CAS ONLINE PRINTOUT

L4 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2006:1198474 CAPLUS
DN 146:121863
TI Efficient DMF-catalyzed coupling of epoxides with CO₂ under solvent-free conditions to afford cyclic carbonates
AU Jiang, Jia-Li; Hua, Ruimao
CS Department of Chemistry, Innovative Catalysis Program, Key Laboratory of Organic Optoelectronics and Molecular Engineering of Ministry of Education, Tsinghua University, Beijing, Peop. Rep. China
SO Synthetic Communications (2006), 36(21), 3141-3148
CODEN: SYNCAV; ISSN: 0039-7911
PB Taylor & Francis, Inc.
DT Journal
LA English
OS CASREACT 146:121863
AB To develop a simple, low-mol., and cost-effective organocatalyst for the coupling of epoxides with CO₂, we have screened this coupling reaction in different organic solvents and found that DMF is an efficient organic catalyst for the coupling of epoxides with CO₂ to give cyclic carbonates in high yield. In some cases, the catalytic activity of DMF can be significantly increased by the addition of catalytic amount of H₂O.
IT 42345-73-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of cyclic carbonates by DMF-catalyzed coupling of epoxides with carbon dioxide under solvent-free conditions)
RN 42345-73-3 CAPLUS
CN 1,3-Dioxolan-2-one, 4-[[3-(trimethoxysilyl)propoxy]methyl]- (CA INDEX NAME)



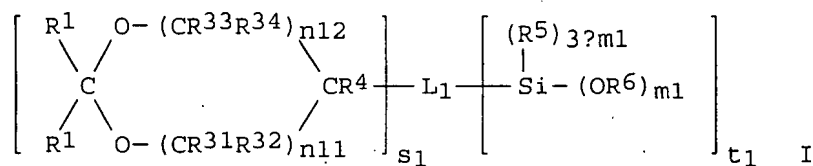
RE.CNT 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2005:1074041 CAPLUS
DN 143:369971
TI Sol-gel reaction products, solid electrolytes, protonic conductors, and membrane-electrode assemblies for fuel cells
IN Wariishi, Koji
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 40 pp.
CODEN: JKXXAF

DT Patent
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2005272556	A	20051006	JP 2004-86053	20040324
PRAI	JP 2004-86053		20040324		
OS	MARPAT 143:369971				
GI					



AB The reaction products are prepared from I (R1, R2 = H, alkyl, aryl, heterocyclic ring, R1 and R2 may link together to form a ring; R31, R32, R33, R34, R4 = H, alkyl, aryl, heterocyclic ring; R5 = alkyl, aryl, heterocyclic ring; R6 = H, alkyl, aryl, silyl; m1 = 1-3; n11, n12 = 0-4; L1 = single bond, linkage group with valency (s1 + t1); s1, t1 = 1-4), and compds. having proton-donating substituent groups. The protonic conductors show high protonic conductivity and low methanol permeability.

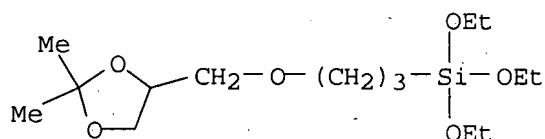
IT 863015-08-1P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(preparation of cyclic acetal-containing alkoxyasilanes for sol-gel reaction products for protonic conductors of fuel cells)

RN 863015-08-1 CAPLUS

CN Silane, [3-[(2,2-dimethyl-1,3-dioxolan-4-yl)methoxy]propyl]triethoxy- (9CI) (CA INDEX NAME)

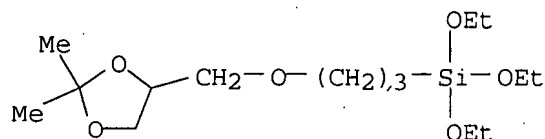


IT 863015-08-1DP, polymers with oxidized mercaptoalkyltrialkoxysilanes and alkoxyasilanes 866228-58-2P

RL: DEV (Device component use); IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (sol-gel reaction products of cyclic acetal-containing alkoxyasilanes and proton-donating compds. for protonic conductors of fuel cells)

RN 863015-08-1 CAPLUS

CN Silane, [3-[(2,2-dimethyl-1,3-dioxolan-4-yl)methoxy]propyl]triethoxy- (9CI) (CA INDEX NAME)



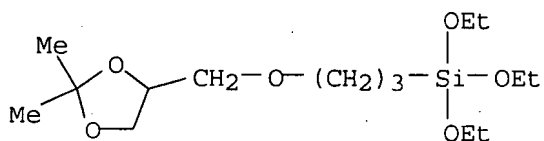
RN 866228-58-2 CAPLUS

CN 1-Propanesulfonic acid, 3-(triethoxysilyl)-, polymer with [3-[(2,2-dimethyl-1,3-dioxolan-4-yl)methoxy]propyl]triethoxysilane and 4,4,13,13-tetraethoxy-3,14-dioxo-4,13-disilahehexadecane (9CI) (CA INDEX NAME)

CM 1

CRN 863015-08-1

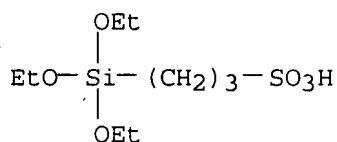
CMF C15 H32 O6 Si



CM 2

CRN 260784-99-4

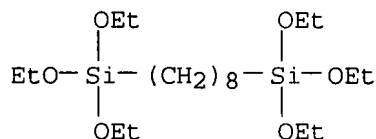
CMF C9 H22 O6 S Si



CM 3

CRN 52217-60-4

CMF C20 H46 O6 Si2



L4 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2005:902902 CAPLUS

DN 143:230419

TI Preparation of organosilicon compounds for organic silicone resin having diols with good storage stability

IN Komuro, Katsuhiko; Suzuki, Hiroshi

PA Toagosei Co., Ltd., Japan

SO PCT Int. Appl., 24 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

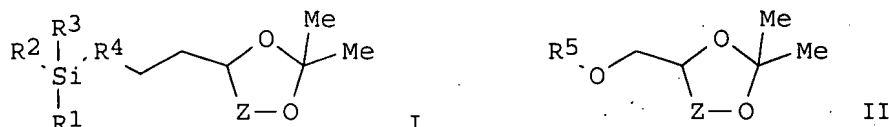
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2005077960	A1	20050825	WO 2005-JP1972	20050209
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,				

CAS ONLINE PRINTOUT

EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
MR, NE, SN, TD, TG

	KR 2007010124	A	20070122	KR 2006-718987	20060915
	US 2007173625	A1	20070726	US 2007-589262	20070111
PRAI	JP 2004-39064	A	20040216		
	JP 2004-39065	A	20040216		
	WO 2005-JP1972	W	20050209		

GI



AB The organosilicon resin having a diol is prepared by hydrolyzing/condensing an organic compound I obtained by hydrosilylation reaction between a compound

II and a silane compound $R_1R_2R_3SiH$ with a polyfunctional alkoxy silane, wherein $R_1, R_2, R_3 = C1-6$ alkyl or alkoxy; $R_4 = C2-6$ alkylene; $R_5 =$ alkene having a terminal C:C bond and $Z = C1-3$ alkylene. The organosilicon resin is produced by the hydrolysis/condensation of a mixture comprising the organosilicon compound I and a mol. weight modifier. Thus, 227 mmol 2,2-dimethyl-1,3-dioxolane-4-methanol and 250 mmol allyl bromide were reacted in the presence of sodium hydride, 119 mmol of the resulting 4-[(allyloxy)methyl]-2,2-dimethyl-1,3-dioxolane was reacted with 131 mmol triethoxysilane in the presence of a divinyltetramethyldisiloxane platinum complex to give 4-[(3-triethoxysilylpropyloxy)methyl]-2,2-dimethyl-1,3-dioxolane, 12 mmol of which was reacted with 44.1 mmol methyltrimethoxysilane and 12 mmol hexamethyldisiloxane in the presence of 3.74 g 1.5% aqueous hydrochloric acid for 1.5 h, reacted with hexamethyldisilazane, and dried to give a silsesquioxane resin having diols, showing good storage stability.

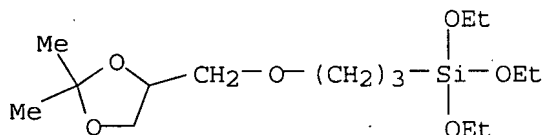
IT 863015-08-1P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of organosilicon compds. for organic silicone resin having diols)

RN 863015-08-1 CAPLUS

CN Silane, [3-[(2,2-dimethyl-1,3-dioxolan-4-yl)methoxy]propyl]triethoxy- (9CI) (CA INDEX NAME)



IT 863015-09-2DP, trimethylsilyl-terminated, deprotected

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(preparation of organosilicon compds. for organic silicone resin having diols)

RN 863015-09-2 CAPLUS

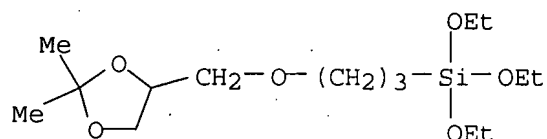
CAS ONLINE PRINTOUT

CN Silane, [3-[(2,2-dimethyl-1,3-dioxolan-4-yl)methoxy]propyl]triethoxy-, polymer with trimethoxymethylsilane (9CI) (CA INDEX NAME)

CM 1

CRN 863015-08-1

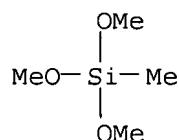
CMF C15 H32 O6 Si



CM 2

CRN 1185-55-3

CMF C4 H12 O3 Si



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2003:211150 CAPLUS

DN 139:7268

TI Synthesis and dielectric constants of polymers with cyclic carbonate pendant groups

AU Purdy, Andrew P.; Levien, Elizabeth; Hwang, Ann

CS Chemistry Division, Naval Research Laboratory, Washington, DC, 20375-5342, USA

SO Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (2003), 44(1), 854-855

CODEN: ACPPAY; ISSN: 0032-3934

PB American Chemical Society, Division of Polymer Chemistry

DT Journal; (computer optical disk)

LA English

AB Polymers containing pendant 5-membered cyclic carbonate functionalities were prepared and their dielec. consts. were measured as a function of frequency. Glycerol carbonate methacrylate, a known compound, was polymerized in bulk. It had a dielec. constant ~6 at 1 kHz which dropped to ~5 at 1 MHz, with an dielec. loss ~ 0.1 at 1 kHz. Copolymers with Me methacrylate had lower dielec. consts., with similar loss factors. A silicone polymer with propoxy-glycerol carbonate pendant groups was also prepared and crosslinked with varying amts. of Jeffamine T-403 or triethylenetetramine. Dielec. consts. >20 at 1 kHz were obtained, but the materials had high dielec. losses, and showed some ionic conductivity that could have come from autoionization of the hydroxyethyl carbamate crosslink moieties.

IT 532947-06-1P

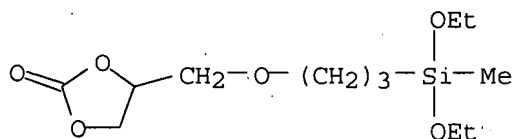
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

CAS ONLINE PRINTOUT

(monomer; synthesis and dielec. consts. of polymers with cyclic carbonate pendant groups)

RN 532947-06-1 CAPLUS

CN 1,3-Dioxolan-2-one, 4-[[3-(diethoxymethylsilyl)propoxy]methyl]- (CA INDEX NAME)



IT 532947-10-7DP, trimethylsilyl-terminated

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(oligomeric; synthesis and dielec. consts. of polymers with cyclic carbonate pendant groups)

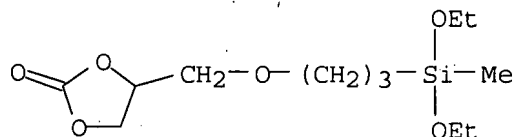
RN 532947-10-7 CAPLUS

CN 1,3-Dioxolan-2-one, 4-[[3-(diethoxymethylsilyl)propoxy]methyl]-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 532947-06-1

CMF C12 H24 O6 Si



IT 532947-13-0P 532947-15-2P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (synthesis and dielec. consts. of polymers with cyclic carbonate pendant groups)

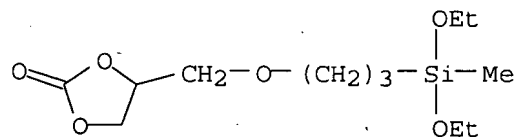
RN 532947-13-0 CAPLUS

CN 1,3-Dioxolan-2-one, 4-[[3-(diethoxymethylsilyl)propoxy]methyl]-, polymer with N,N'-bis(2-aminoethyl)-1,2-ethanediamine (9CI) (CA INDEX NAME)

CM 1

CRN 532947-06-1

CMF C12 H24 O6 Si

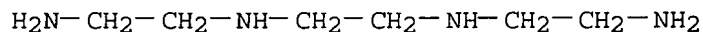


CM 2

CRN 112-24-3

CAS ONLINE PRINTOUT

CMF C6 H18 N4



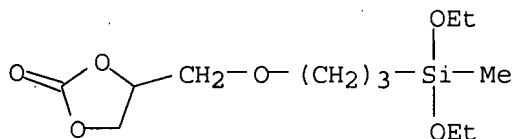
RN 532947-15-2 CAPLUS

CN 1,3-Dioxolan-2-one, 4-[[3-(diethoxymethylsilyl)propoxy)methyl]-, polymer with α -hydro- ω -(2-aminomethylethoxy) [poly[oxy(methyl-1,2-ethanediyl)]] ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (9CI) (CA INDEX NAME)

CM 1

CRN 532947-06-1

CMF C12 H24 O6 Si

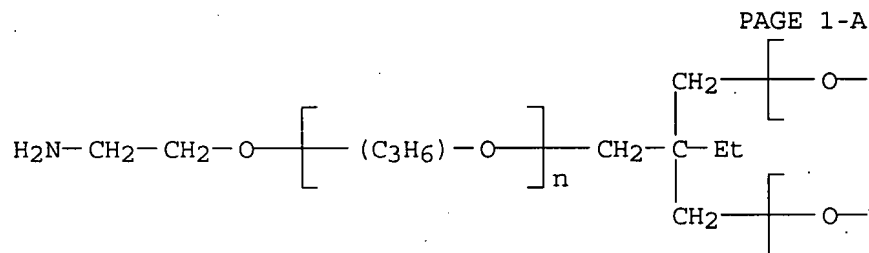


CM 2

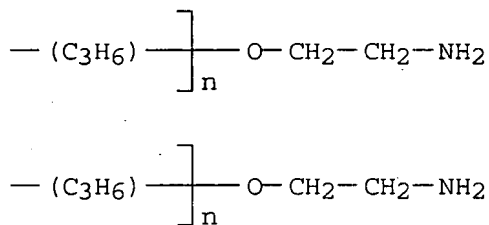
CRN 39423-51-3

CMF (C3 H6 O)_n (C3 H6 O)_n (C3 H6 O)_n C15 H35 N3 O3

CCI IDS, PMS



3 (D1-Me)



PAGE 1-B

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1998:335569 CAPLUS

DN 129:67867

TI Preparation of 1,3-dioxolane-ring-containing alkoxyasilanes as silane coupling agents

IN Ishikawa, Kazunori

PA Yokohama Rubber Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10139787	A	19980526	JP 1996-294933	19961107
	JP 3819087	B2	20060906		
PRAI	JP 1996-294933		19961107		

OS MARPAT 129:67867

AB Comps. containing 1,3-dioxolane ring and alkoxyisilyl group are prepared as silane coupling agents for adhesives, sealants, and primers (no data). A 187, an epoxy silane, was treated with BF₃.OEt₂ in Me₂CO to give 52% 2,2-dimethyl-4-(3-trimethoxysilylpropoxy)methyl-1,3-dioxolane.

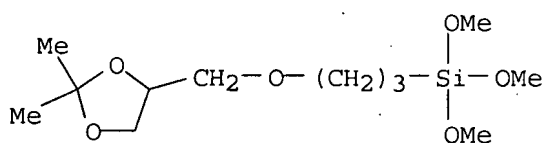
IT 208923-72-2P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(preparation of dioxolane-containing alkoxyasilanes as silane coupling agents)

RN 208923-72-2 CAPLUS

CN Silane, [3-[(2,2-dimethyl-1,3-dioxolan-4-yl)methoxy]propyl]trimethoxy-(9CI) (CA INDEX NAME).



L4 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1996:171857 CAPLUS

DN 124:203302

TI Hydrolyzable and polymerizable silanes containing 2-oxo-1,3-dioxacycloalkyl groups and their preparation and use

IN Wolter, Herbert

PA Fraunhofer-Gesellschaft zur Foerderung der Angewandten Forschung e.V., Germany

SO Ger., 30 pp.

CODEN: GWXXAW

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4423811	C1	19960118	DE 1994-4423811	19940706
	EP 694550	A2	19960131	EP 1995-107099	19950511
	EP 694550	A3	19980415		
	EP 694550	B1	20010808		

CAS ONLINE PRINTOUT

R: AT, BE, CH, DE, DK, FR, GB, IT, LI, LU, NL, SE

AT 203995	T	20010815	AT 1995-107099	19950511
US 5756767	A	19980526	US 1997-856939	19970515
US 5917075	A	19990629	US 1997-995373	19971222

PRAI DE 1994-4423811 A 19940706
 US 1995-499026 B1 19950706
 US 1997-856939 A3 19970515

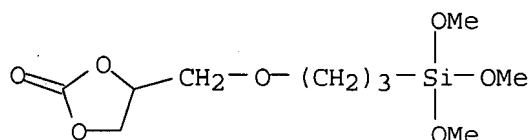
OS MARPAT 124:203302

AB The title compds., e.g., $\text{RCH}_2\text{O}(\text{CH}_2)_3\text{Si}(\text{OMe})_2\text{R}_1$ (I; R = 2-oxo-1,3-dioxacyclopentyl; $\text{R}_1 = \text{OMe}, \text{Me}$); are prepared for use as monomers and reactants. Reacting (3-glycidyloxypropyl)trimethoxysilane with CO_2 gave I ($\text{R}_1 = \text{OMe}$) which was reacted with $\text{H}_2\text{NCH}_2\text{CH}_2\text{NH}_2$ to give $[(\text{MeO})_3\text{Si}(\text{CH}_2)_3\text{OCH}_2\text{CH}(\text{OH})\text{CH}_2\text{O}_2\text{CNHCH}_2]_2$.

IT 42345-73-3P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (preparation as hydrolyzable and polymerizable monomer and reactant and ring-opening reaction with ethylenediamine)

RN 42345-73-3 CAPLUS

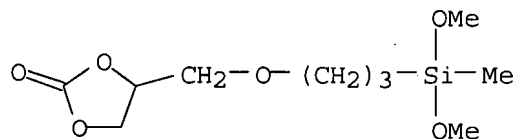
CN 1,3-Dioxolan-2-one, 4-[[3-(trimethoxysilyl)propoxy]methyl]- (CA INDEX NAME)



IT 174569-12-1P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of hydrolyzable and polymerizable)

RN 174569-12-1 CAPLUS

CN 1,3-Dioxolan-2-one, 4-[[3-(dimethoxymethylsilyl)propoxy]methyl]- (9CI)
 (CA INDEX NAME)



L4 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1995:222363 CAPLUS

DN 122:291655

TI A new silane precursor with reduced polymerization shrinkage

AU Wolter, H.; Storch, W.

CS Fraunhofer-Institut Silicatforschung, Wuerzburg, Germany

SO Journal of Sol-Gel Science and Technology (1994), 2(1/2/3), 93-6
 CODEN: JSGTEC; ISSN: 0928-0707

PB Kluwer

DT Journal

LA English

AB Silsesquioxanes with reduced shrinkage during curing are prepared from 2-[[[3-(trimethoxysilyl)propoxy]methyl]-1,4,6-trioxaspiro[4.4]nonane (I). The I is prepared by condensation of butyrolactone with 3-

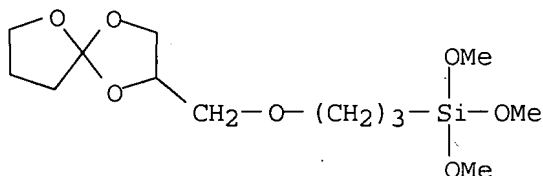
CAS ONLINE PRINTOUT

(glycidyloxy)propyl]trimethoxysilane. The polymer network is formed by hydrolytic polymerization of the trimethoxysilane moiety and the crosslinking is carried out by a thermal or photochem. cationic ring-opening process.

IT 148887-01-8P, 2-[[3-(Trimethoxysilyl)propoxy)methyl]-1,4,6-trioxaspiro[4.4]nonane
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (monomer; in preparation of low-shrinkage curing silsesquioxanes)

RN 148887-01-8 CAPLUS

CN Silane, trimethoxy[3-(1,4,6-trioxaspiro[4.4]non-2-ylmethoxy)propyl]- (9CI)
 (CA INDEX NAME)



IT 163214-76-4P, 2-[[3-(Trimethoxysilyl)propoxy)methyl]-1,4,6-trioxaspiro[4.4]nonane homopolymer
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of low-shrinkage curing)

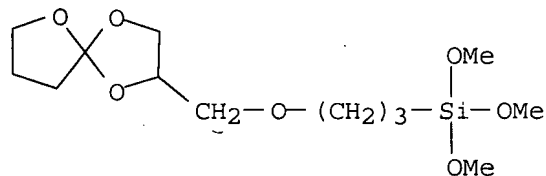
RN 163214-76-4 CAPLUS

CN Silane, trimethoxy[3-(1,4,6-trioxaspiro[4.4]non-2-ylmethoxy)propyl]-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 148887-01-8

CMF C13 H26 O7 Si



L4 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1993:473279 CAPLUS

DN 119:73279

TI Preparation and use of polymerizable and hydrolyzable silanes

IN Wolter, Herbert

PA Fraunhofer-Gesellschaft zur Foerderung der Angewandten Forschung eV, Germany

SO Ger., 20 pp.
 CODEN: GWXXAW

DT Patent

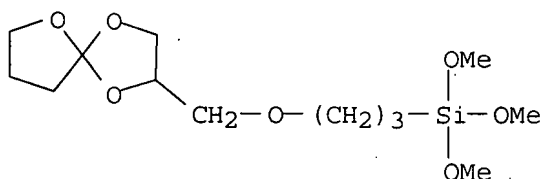
LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4125201	C1	19921001	DE 1991-4125201	19910730
	EP 525392	A1	19930203	EP 1992-110752	19920625

CAS ONLINE PRINTOUT

EP 525392 B1 19960821
 R: AT, BE, CH, DE, DK, FR, GB, IT, LI, LU, NL, SE
 AT 141607 T 19960915 AT 1992-110752 19920625
 US 5414093 A 19950509 US 1992-916584 19920720
 JP 05222199 A 19930831 JP 1992-204107 19920730
 JP 3187150 B2 20010711
 PRAI DE 1991-4125201 A 19910730
 OS MARPAT 119:73279
 AB The silanes $\text{YnSiXmR}_4\text{-m-n}$ ($\text{X} = \text{H}$, halogen, OH, alkoxy, acyloxy, acyl, carboalkoxy, amino; $\text{Y} = 1,4,6\text{-trioxaspiro}[4.4]\text{nonyl}$ group, optionally substituted; $\text{m}, \text{n} = 1\text{-}3$; $\text{m} + \text{n} \leq 4$), useful in the preparation of coatings, adhesives, sealants, etc., are prepared Adding 307 g [3-(glycidyloxy)propyl]trimethoxysilane in 300 mL CH_2Cl_2 over 1 h to 129 g γ -butyrolactone and 4.62 g $\text{BF}_3 \cdot \text{Et}_2\text{O}$ in 600 mL CH_2Cl_2 stirred at room temperature and stirring for 2 h gave 2-[[3-(trimethoxysilyl)propoxy]methyl]-1,4,6-trioxaspiro[4.4]nonane (I). Adding 1.20 mg Et_3N and 0.54 g H_2O dropwise to 6.54 g I and stirring for apprx. 20 h at room temperature gave a siloxane which could be cured by cationic polymerization
 IT 148887-01-8P
 RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent) (preparation and hydrolytic polymerization of)
 RN 148887-01-8 CAPLUS
 CN Silane, trimethoxy[3-(1,4,6-trioxaspiro[4.4]non-2-ylmethoxy)propyl]- (9CI) (CA INDEX NAME)



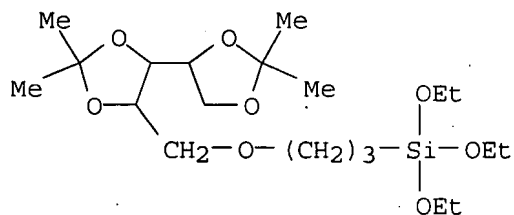
L4 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1986:609334 CAPLUS
 DN 105:209334
 TI 1-O-[3-(Triethoxysilyl)propyl]- and 1-O-[3-(diethoxymethylsilyl)propyl]-2,3:4,5-di-O-isopropylidene-D-arabinitol
 IN Capka, Martin; Hetflejš, Jiri; Holy, Antonin; Rosenberg, Ivan
 PA Czech.
 SO Czech., 3 pp.
 CODEN: CZXXA9
 DT Patent
 LA Czech
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI CS 229088	B1	19840514	CS 1982-8567	19821129
PRAI CS 1982-8567		19821129		

GI For diagram(s), see printed CA Issue.
 AB The title compds. (I; $\text{R} = \text{OEt}$, Me) were prepared in 41-45% yield by addition of $(\text{EtO})_3\text{SiH}$ and $(\text{EtO})_2\text{MeSiH}$, resp., to 1-O-allyl-2,3:4,5-di-O-isopropylidene-D-arabinitol at 120° in THF, catalyzed by H_2PtCl_6 . I are modifiers of inorg. supports in chromatog. and immobilization of biol. substances.
 IT 105239-74-5P 105239-75-6P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as chromatog. support modifier, for immobilization of biol. substances)
 RN 105239-74-5 CAPLUS

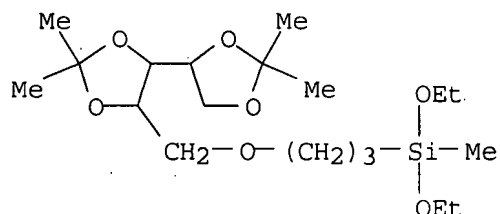
CAS ONLINE PRINTOUT

CN D-Arabinitol, 2,3:4,5-bis-O-(1-methylethylidene)-1-O-[3-(triethoxysilyl)propyl]- (9CI) (CA INDEX NAME)



RN 105239-75-6 CAPLUS

CN D-Arabinitol, 1-O-[3-(diethoxymethylsilyl)propyl]-2,3:4,5-bis-O-(1-methylethylidene)- (9CI) (CA INDEX NAME)



L4 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1979:205196 CAPLUS

DN 90:205196

TI Use of silanes having capped functional groups as adhesivizing agents

IN Amort, Juergen; Nestler, Heinz

PA Dynamit Nobel A.-G., Fed. Rep. Ger.

SO U.S., 5 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4118540	A	19781003	US 1976-755876	19761230
	DE 2559259	A1	19770714	DE 1975-2559259	19751231
PRAI	DE 1975-2559259	A	19751231		

AB Compds. such as (EtO)₂CHCH₂NH(CH₂)₃Si(OMe)₃ [63968-38-7] and 4-[[3-(trimethoxysilyl)propoxy)methyl]-1,3-dioxolane [50650-15-2] are useful as coupling agents for improving the adhesion between glass fibers, sand, metal surfaces, etc., and resins such as epoxy and furan resins. Mixts. of the coupling agents and resins, especially phenolic resol resins, have a long shelf life.

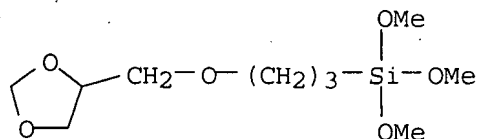
IT 50650-15-2

RL: USES (Uses)

(coupling agents, for inorg. oxide and metal surfaces and resins)

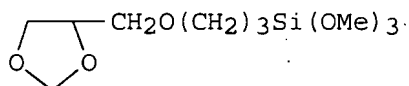
RN 50650-15-2 CAPLUS

CN Silane, [3-(1,3-dioxolan-4-ylmethoxy)propyl]trimethoxy- (9CI) (CA INDEX NAME)



L4 ANSWER 13 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1977:519455. CAPLUS
 DN 87:119455
 TI Silanes with blocked functional groups as adhesion promoters
 IN Nestler, Heinz; Amort, Juergen
 PA Dynamit Nobel A.-G., Fed. Rep. Ger.
 SO Ger. Offen., 12 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2559259	A1	19770714	DE 1975-2559259	19751231
	GB 1577928	A	19801029	GB 1976-52949	19761217
	GB 1577929	A	19801029	GB 1979-21916	19761217
	JP 52084240	A	19770713	JP 1976-160781	19761228
	NL 7614579	A	19770704	NL 1976-14579	19761230
	FR 2336983	A1	19770729	FR 1976-39630	19761230
	FR 2336983	B1	19821203		
	US 4118540	A	19781003	US 1976-755876	19761230
PRAI	DE 1975-2559259	A	19751231		
	GB 1976-52949	A	19761217		
GI					

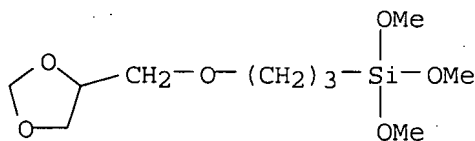


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AB Alkoxysilanes containing acetal groups or 1,3-dioxolane derivs. are useful as corrosion-protective coatings for metals or as couplers for improved adhesion. Thus, a degreased 15 + 8-cm Cu plate is immersed in a 10% alc. HOAc solution of silane I [50650-15-2] and dried 1 h at 130° to give a hard, adherent film which cannot be detached by scratching with a knife.

IT 50650-15-2
 RL: USES (Uses)
 (coatings for metals and couplers for improved adhesion in fiber-reinforced plastics)

RN 50650-15-2 CAPLUS
 CN Silane, [3-(1,3-dioxolan-4-ylmethoxy)propyl]trimethoxy- (9CI) (CA INDEX NAME)



CAS ONLINE PRINTOUT

L4 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1973:478952 CAPLUS

DN 79:78952

TI [[[Trimethoxysilyl)propoxy)methyl]-1,3-dioxolanes

IN Koetzsch, Hans J.; Vahlensieck, Hans J.

PA Dynamit Nobel A.-G.

SO Ger. Offen., 11 pp.

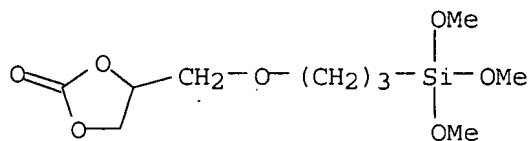
CODEN: GWXXBX

DT Patent

LA German

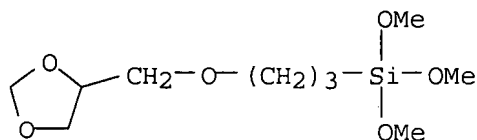
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2159991	A1	19730614	DE 1971-2159991	19711203
	DE 2159991	C2	19821021		
	GB 1364199	A	19740821	GB 1972-54097	19721122
	CH 575426	A5	19760514	CH 1972-17338	19721128
	US 3825567	A	19740723	US 1972-310495	19721129
	FR 2162115	A1	19730713	FR 1972-42629	19721130
	JP 50040533	A	19750414	JP 1972-121429	19721204
	US 3932464	A	19760113	US 1974-469937	19740514
	US 4213908	A	19800722	US 1975-635533	19751126
PRAI	DE 1971-2159991	A	19711203		
	US 1972-310495	A3	19721129		
	US 1974-469937	A3	19740514		
GI	For diagram(s), see printed CA Issue.				
AB	The Si compds. I and II were prepared by reaction of (MeO) ₃ SiH with the dioxolanes III (RR ₁ = O; R = R ₁ = H, resp.) over chloroplatinic acid in Me ₂ CO at 70°. Refluxing I gave [3-(glycidyloxy)propyl]trimethoxysilane.				
IT	42345-73-3P 50650-15-2P				
	RL: SPN (Synthetic preparation); PREP (Preparation)				
	(preparation of)				
RN	42345-73-3 CAPLUS				
CN	1,3-Dioxolan-2-one, 4-[[3-(trimethoxysilyl)propoxy)methyl]- (CA INDEX NAME)				



RN 50650-15-2 CAPLUS

CN Silane, [3-(1,3-dioxolan-4-ylmethoxy)propyl]trimethoxy- (9CI) (CA INDEX NAME)



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CAS ONLINE PRINTOUT